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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,396	11/02/2006	Ping Li	021238-832	1054
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EXAMINER NGUYEN, PHU HOANG				
ART UNIT 1747		PAPER NUMBER		
NOTIFICATION DATE 03/18/2011		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com
offserv@bipc.com

Office Action Summary

Application No.

10/560,396

Applicant(s)

LI ET AL.

Examiner

PHU H. NGUYEN

Art Unit

1747

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/22/2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 10, 17, 21, 31, 32, 35, 37, 39, 40, 47, 53, 62-64, 73, 74 and 79 is/are pending in the application.
- 4a) Of the above claim(s) 31, 32, 35, 37, 39, 40, 47, 53, 62-64, 73, 74 and 79-81 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 10, 17 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-592)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 17 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snaird et al. (U.S. Pub. No. 20020062834) in view of Zawadzki et al. (U.S. Pub. No. 20020179106) and further in view of Bereman (U.S. Pub. No. 20030000538).

Regarding claims 1 and 21, Snaird discloses a smoking article comprising:

a tobacco rod (54, fig. 6) having a wrapper (10, fig. 6) formed around the tobacco rod, the wrapper including a patterned deposit (it is noticed that any deposit is a pattern deposit see 18, fig. 6) on at least a portion of one surface of the wrapper,

wherein the pattern deposit comprises catalyst particles of catalyzing, oxidizing and/or reducing the conversion of a constituent gas component in the mainstream and/or sidestream smoke of the smoking article (abstract and paragraph 57), and

wherein the gradients of zeolites can be custom designed and lead to layers of the zeolite composition where the suitable catalyst is dispersed throughout these layers; since the layers have a gradient of adsorption it inherently creates a concentration gradient of the catalyst between a first portion having a low concentration feature and a second portion having a higher concentration feature (paragraph 52). Snaird does not

expressly disclose the concentration gradient of catalyst between two portions along the length (distal and proximal) of the cigarette. Zawadzki discloses cigarette paper with discrete portions along the length (distal and proximal) that can be treated with titanium oxide (22, fig. 1 and claims 99-100) creating a gradient between a low concentration portion and a high concentration portion along the cigarette. Furthermore, Bereman discloses using metallic or carbonaceous particles to remove harmful substance from smoking a smoking article (Abstract) and the need for alterations in the concentration of the metallic or carbonaceous particles to compensate for reactions of additional components with the metallic or carbonaceous particles. The reference of Bereman suggests the needs for applying different concentration of catalyst material in a smoking article to compensate for reactions with other additional materials (paragraph 110). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Bereman to the smoking article of Snaidr and vary the concentration of the catalyst along the wrapper as needed.

Snaidr also discloses loading catalyst to the wrapper from one end to the other end (see fig. 1) but does not expressly disclose separate loading of catalyst on the wrapper, however it would have been obvious to one of ordinary skill in the art at the time the invention was made to load the catalyst on one end of the wrapper and then load the catalyst on the other end of the wrapper because selection of any order of performing process steps is prima facie obvious in the absence of new or unexpected results. See also *In re Burhans*, 154 F.2d 690, 69 USPQ 330 (CCPA 1946).

Regarding claim 2, Snaidr discloses the smoking article wherein the constituent gas component is carbon monoxide and/or nitric oxide (paragraph 82).

Regarding claim 17, Snaidr discloses the smoking article wherein the wrapper is a first wrapper and the smoking article further comprises a second wrapper (paragraph 26).

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Snaidr et al. (U.S. Pub. No. 20020062834) in view of Zawadzki et al. (U.S. Pub. No. 20020179106) and Bereman (U.S. Pub. No. 20030000538) as applied to claim 1 above and further in view of Smith (U.S. Patent No. 3636027). Snaidr does not disclose the oxide catalyst is supported. Smith discloses a catalyst system can be self supported or deposited on a support or carrier for dispersing the catalyst system to increase its effective surface. Calcium carbonate is one of the useful compound as carrier (column 7, lines 49-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to support the catalyst on a compound such as calcium carbonate to increase its effective surface as taught by Smith.

Response to Arguments

Applicant's arguments with respect to claims 1-2, 10, 17 and 21 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHU H. NGUYEN whose telephone number is (571)272-5931. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

P.N 3/12/2011

/Matthew J. Daniels/
Supervisory Patent Examiner, Art Unit 1741